

NORTEL
NORTHERN TELECOM

Product Bulletin

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Norstar-PLUS vs. Lucent Merlin Legend

Attached you will find competitive presentation on Lucent's Merlin Legend. An overview on Lucent's system, and a comparison of Legend versus MICS-Plus platform have also been included.

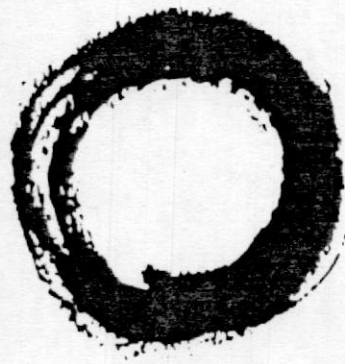
Some of the main advantages of Nortel over Lucent are:

- In all digital configurations, Norstar grows larger than Legend
- Legend's MTBF (Mean Time Before Failure) is 2.1 yrs. vs. 62 yrs. of MICS
- Norstar's operational costs are lower than Legend's
- Legend does not have a wireless option with roaming capabilities
- Legend system does not enjoy a good integrated voice mail system

If you have any questions or comments, or require further information, please contact:

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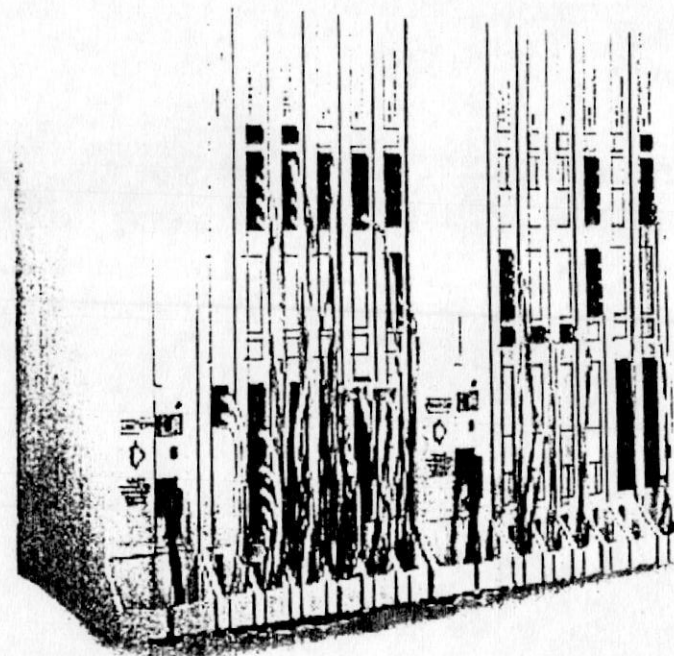
Lucent Legend

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Merlin Legend

- System Capacity 80x200
- 17 Universal slots
- Supports ISDN PRI/BRI/T1
- Fully Digital
- MLX Series telephones
- BIS (Merlin) and Analog telephones
- Cordless Phones-TransTalk & MDC Multi-line
- Intuity Message Manager
- Audix Voice Mail



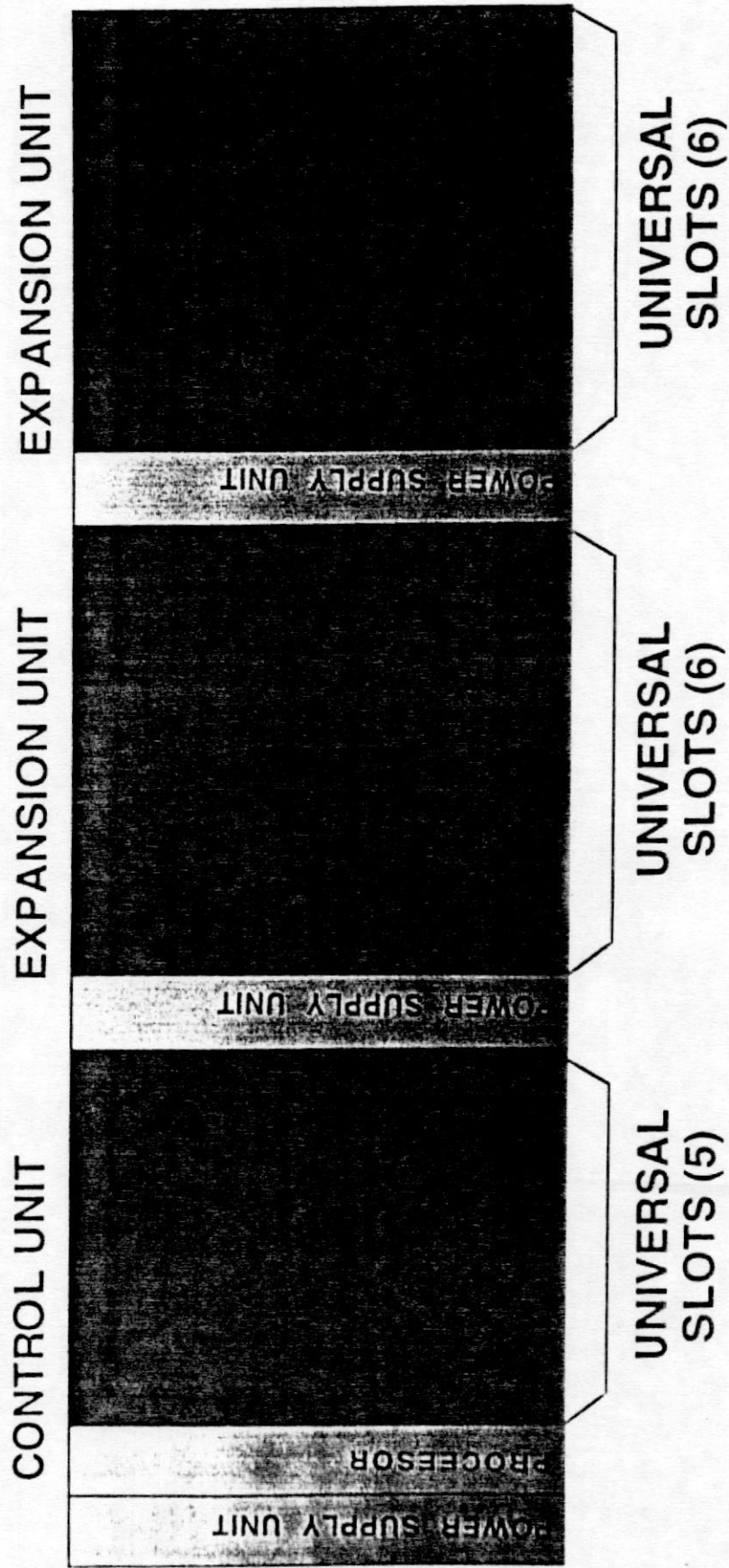
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Merlin Technologies

Merlin Legend

System Configuration



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Cards and Options

<u>Legend Components:</u>	
Basic Carrier	Processor Module
Power Supply Module	008 OPT - 8 Off-premise Stations
400EM - 4 E & M Tie-trunks, 1 Power-fail jack	400 GS/LS/TTR..4 Loop - start/Ground-start, 1 Power-fail
800 DID - 8 DID trunks	100D - 1 T1 or ISDN interface
800 - 4 Loop-start CO, 2 Power - fail jacks	008 MLX - 8 Digital Station Jacks, jacks, 1 Power-fail jack
800 GS/LS - 8 Loop - start/Ground-start, 2 Power - fail jacks	408 GS/LS - 8 Analog Stations, 4 L.S./G.S. Jacks, 1 Power-fail jack
008 - 8 Analog Station Jacks	012 - 12 Analog (T/R) Stations
<u>DATA SUPPORT:</u>	016 - 16 Analog (T/R) Stations
• Multi-Function Module – Connects digital MLX phones to tip/ring analog devices such as modems	• ISDN 7500B Data Module – Connects data terminal to 008 MLX module. Async: 19.2 kbps, Synch: 64 kbps with optional board.

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LEGEND Release 4.0

- New 016 tip/ring module
 - Supports 16 analog stations
- Support for 200 stations
 - Only using all 016 modules
- Support for National ISDN BRI Service
- New 800 NI-BRI module
- Support for 2B Data applications
 - Data calls using two channels
- Support for digital T1 data transmission
 - Switched 56 support

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Legend Release 4.0

- Delayed Call Forwarding
 - Set the number of rings before a call is forwarded
 - User can screen calls before forwarding
- Voice Announce on the Queued Call Console
 - Off-hook Voice Announce from console
- Time-based option for Calling Group overflow
 - Time limit for calls in queue

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Legend Release 4.0

- Downloadable Firmware for O16 T/R and NI-BRI boards
- Single-Line Telephone Enhancements
 - Disable Transfer
 - No Transfer Return
 - Eliminates unintended transfers caused by handset bounce
 - Forward Disconnect
 - 012 & 016 T/R modules now have disconnect supervision
- 7-digit password for SPM
 - Requires a password for remote admin

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Size Comparison

- In all digital configurations, Norstar grows larger than Legend.

Legend	
<u>Configuration</u>	<u>Size</u>
1 800GS/LS, 16 008 MLX	8x128

3 800GS/LS, 14 008 MLX	24x112
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9 800GS/LS, 8 008 MLX	72x68
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3 T1 x 14 008 MLX	72x112
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Norstar	
<u>Configuration</u>	<u>Size</u>
10 Station Modules (SM)	8x192

2, TM, 8 SM	32x160
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6 TM, 4 SM	80x96
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2 T1, 2 TM, 8 SM	72x160
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Norstar vs. LEGEND

- Legend installation requires non-standard 8-conductor phone jacks
- Speaker paging and building paging cannot be done simultaneously.
- Legend Caller ID does not have a call log
- Loudspeaker paging requires a trunk port.
- Legend phones do not have an integrated headset jack (if headset is used, handset must be removed from the cradle using a mechanical device) →



Available from Hello Direct



Norstar vs. Legend

- Legend does not have Set Lock for feature programming restrictions
- Legend programming can only be done from one set, and there is no password protection
- Norstar's Mean Time Between Failure is higher than Legend:

Legend

2.1* years

Published in the Merlin Legend
Communication Release 3.0 Equipment &
Operations Reference Manual

Modular ICS

62 years



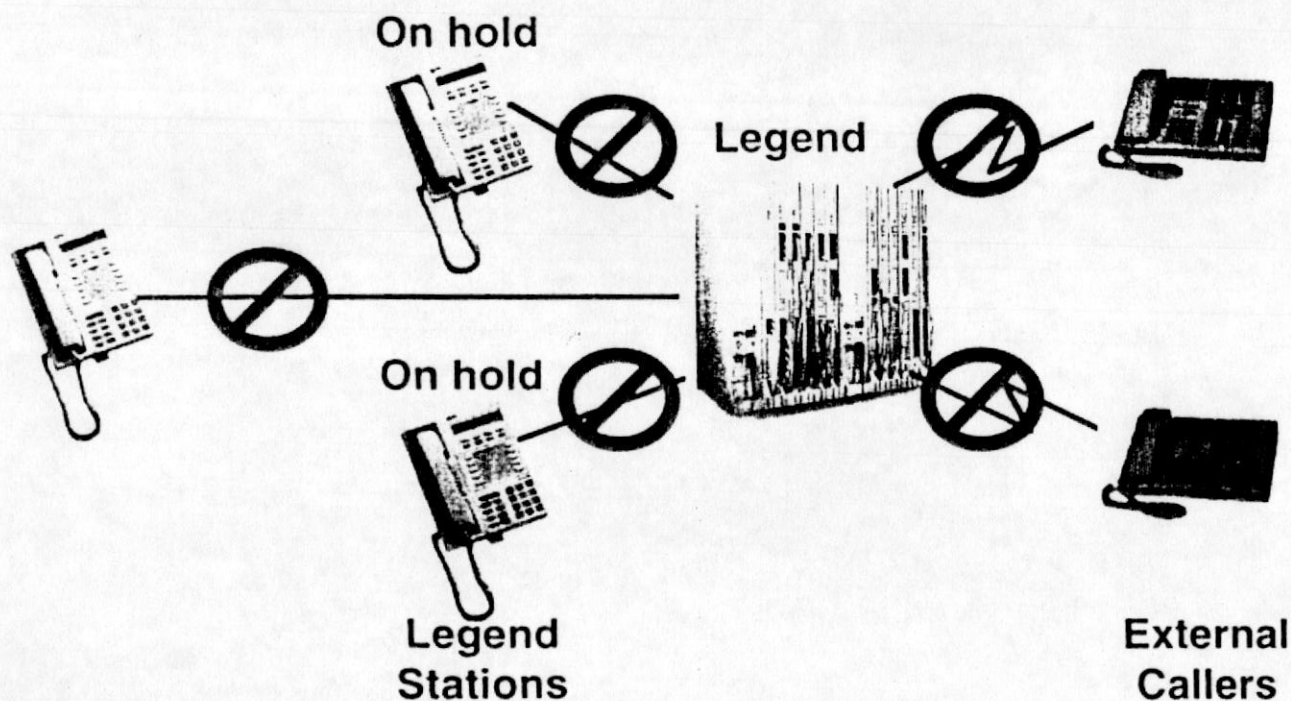
Norstar vs. LEGEND

- Legend does not have Class of Service Passwords
- A conference originator cannot drop from a conference leaving other parties connected on Legend
- Legend does not have Automatic Number Identification on T1
- A separate Channel Service Unit is required for Legend's T1 card (\$500-\$2000)



Legend Conferencing

- Internal parties to a Legend conference call can't go on hold simultaneously or all calls will drop.





Displays and Softkeys

- Norstar's display and softkeys make features easier to use than Legend's features

Cancelling Call Forward

Display shows where call is forwarded—user presses CANCEL softkey to cancel forward

Forward>PEG
CANCEL

Display notifies user that call forward is cancelled

Cancel Forward

Norstar

Forward to: Bob

Forward

Forward to:2234

05/29 9:11

Legend

Display shows where call is forwarded

User presses Forward hardkey to initiate cancel

User enters own extension number

No notification that call forward is cancelled



Power Consumption

- Norstar costs less to operate than Legend

	NORTEL	AT&T	
	Norstar	Legend	Difference
Watts/Unit-Min.	50	150	-100
Watts/Unit-Max.	194	450	-256
BTUs/Unit-Min	170	500	-330
BTUs/Unit-Max	662	1500	-838
Per year costs:			
Energy cost -watts	110	256	-\$146
Energy cost -BTUs	48	110	-\$61
Yearly Total	159	366	-\$207
5 year cost	794	1829	-\$1035



Service Modes

Legend

- Auto Route Selection can't be programmed to activate at different times of day/week
- Night Service only has one timer per day
- Time of Day restrictions tied to Night Service

Norstar

- Norstar has six flexible service mode timers
- Call ringing, dialing restrictions, and call routing (LCR) can each be assigned their own service mode



Service Modes

- Legend can't do it...

Time-of-Day Restrictions



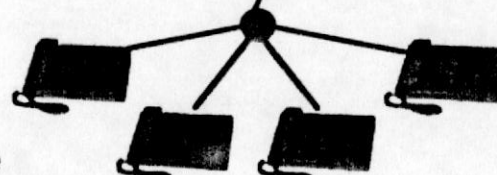
~~Long Distance~~

5:30 p.m. long distance calls are restricted until 7:00 a.m.

5:00 p.m. long distance calls are routed over MCI lines instead of Sprint

Sprint ● MCI

Automatic Route Selection



Ringing Service



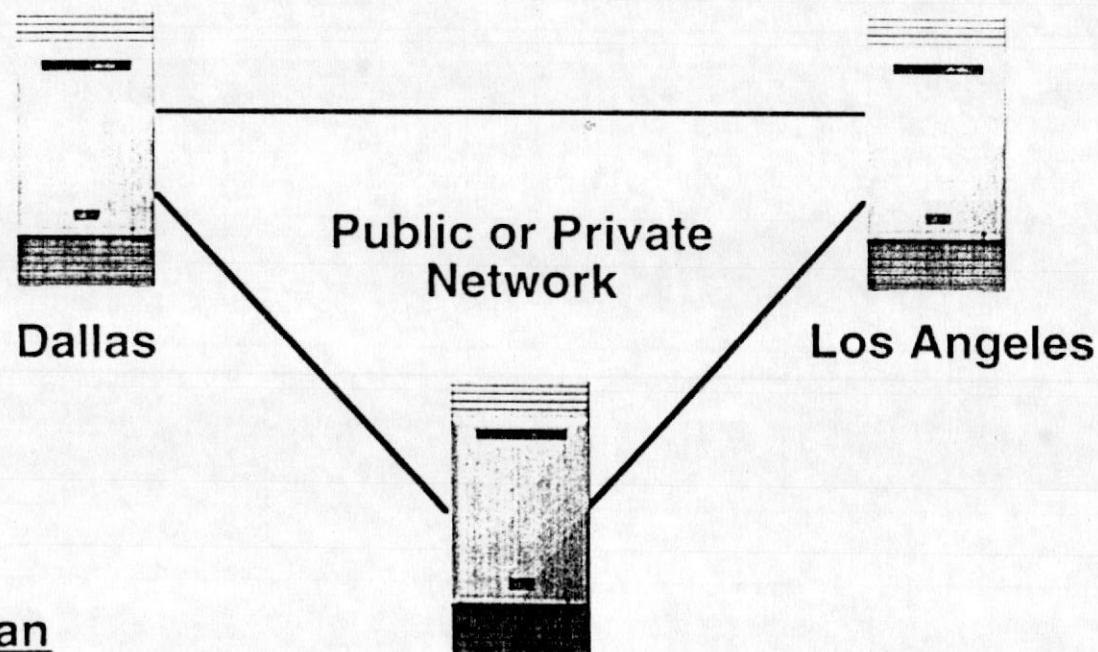
Customer Service

Technical Support

12:00 p.m. calls ring at Tech Support instead of Customer Service. 1:01 p.m. they switch back. You could do this with Legend, but you lose Night Service and everything tied to it.

Coordinated Dialing Plan

- Legend does not have CDP



Numbering Plan

Dallas	3000-3127
New York	3200-3327
Los Angeles	3400-3527

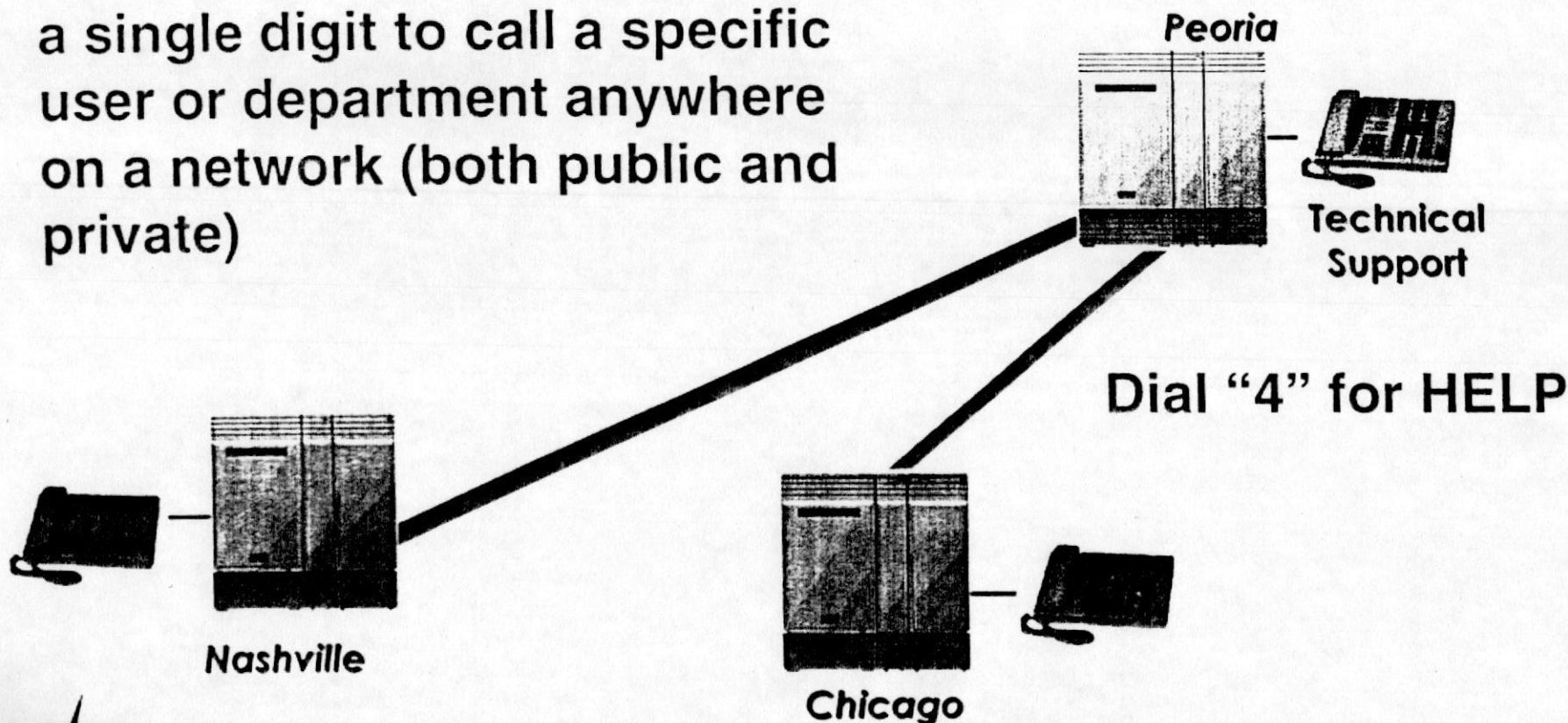
New York



Network Direct Dial

- Legend does not have Network Direct Dial

Network Direct Dial allows users at different sites to dial a single digit to call a specific user or department anywhere on a network (both public and private)

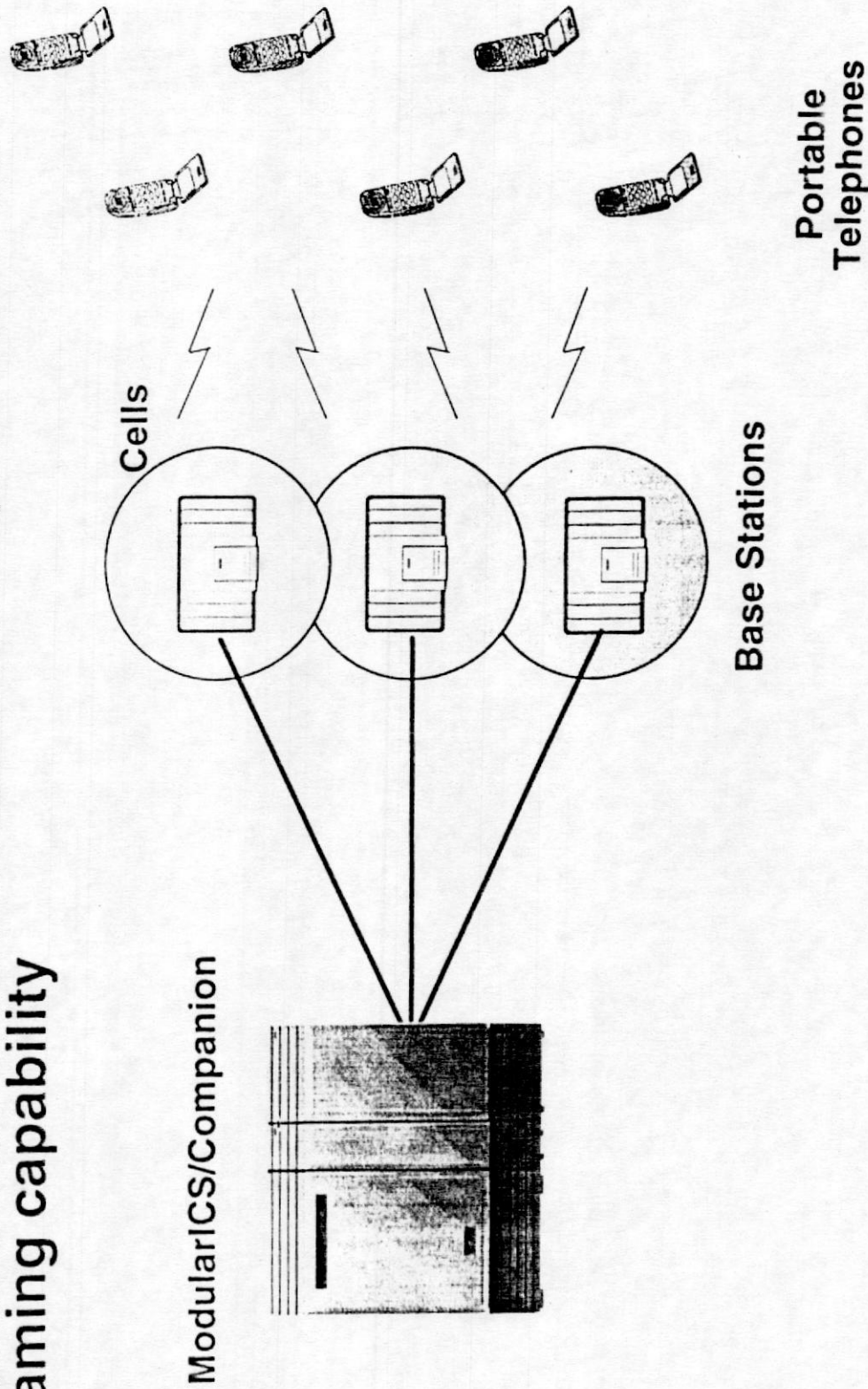




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Norstar Companion

- Legend does not have a wireless option with roaming capability



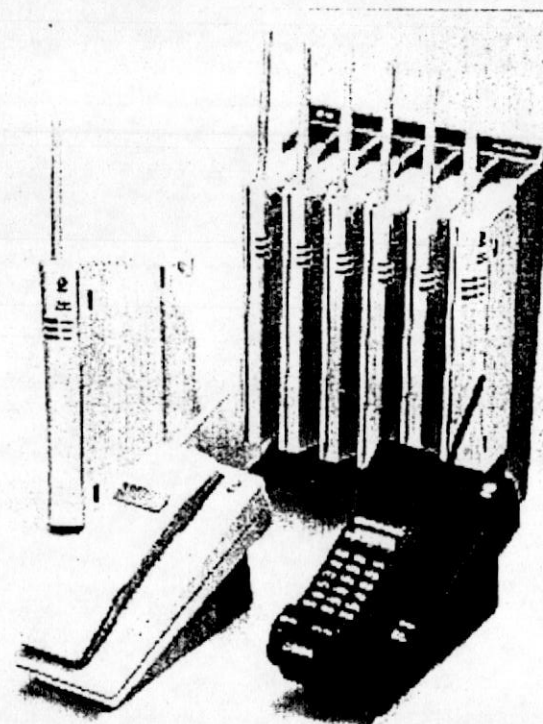
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Wireless Capability

- No wireless telephones are available for Legend, only 900MHz cordless (TransTalk)
- 900MHz cordless coverage is less and it doesn't have roaming and hand-off
- 900MHz cordless shares its radio spectrum with over 550 other devices
 - wireless data networks
 - security and alarm devices
 - medical devices
 - garage door openers
 - wireless audio & video devices
- Since 900MHz is not protected by the FCC, customers investments are not protected



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FCC Notice For 900MHz

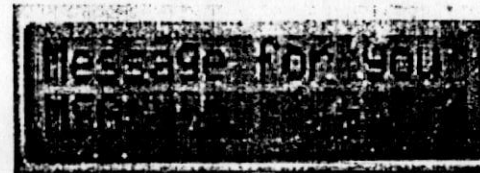
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIED OPERATION. PRIVACY OF COMMUNICATIONS MAY NOT BE ENSURED WHEN USING THIS PHONE. HOWEVER, THIS PHONE USES TECHNOLOGY WHICH GREATLY INCREASES THE DEGREE OF PRIVACY AS COMPARED TO MOST OTHER CORDLESS TELEPHONE.

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Legend Voice Mail

- Legend doesn't have a good integrated voice mail system. Voice mail users don't get softkey access to messages

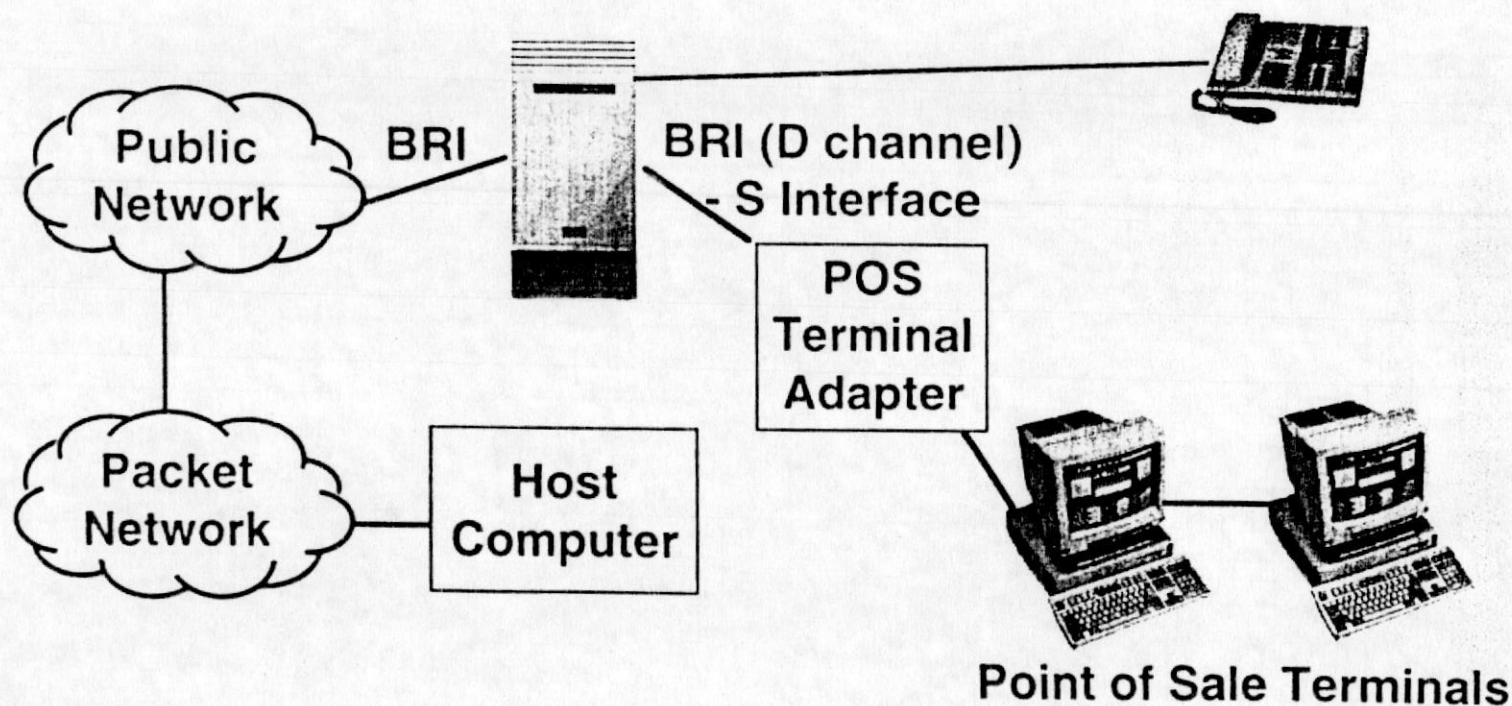


- Legend voice mail voice mail can't be administered from an Legend set, only through a PC
- Norstar M7310 and M7324 users get fast and easy access to voice mail by using softkeys.
- Norstar Voice Mail can be administered through any M7310 or M7324 thereby saving the expense of purchasing another PC.



ISDN Applications

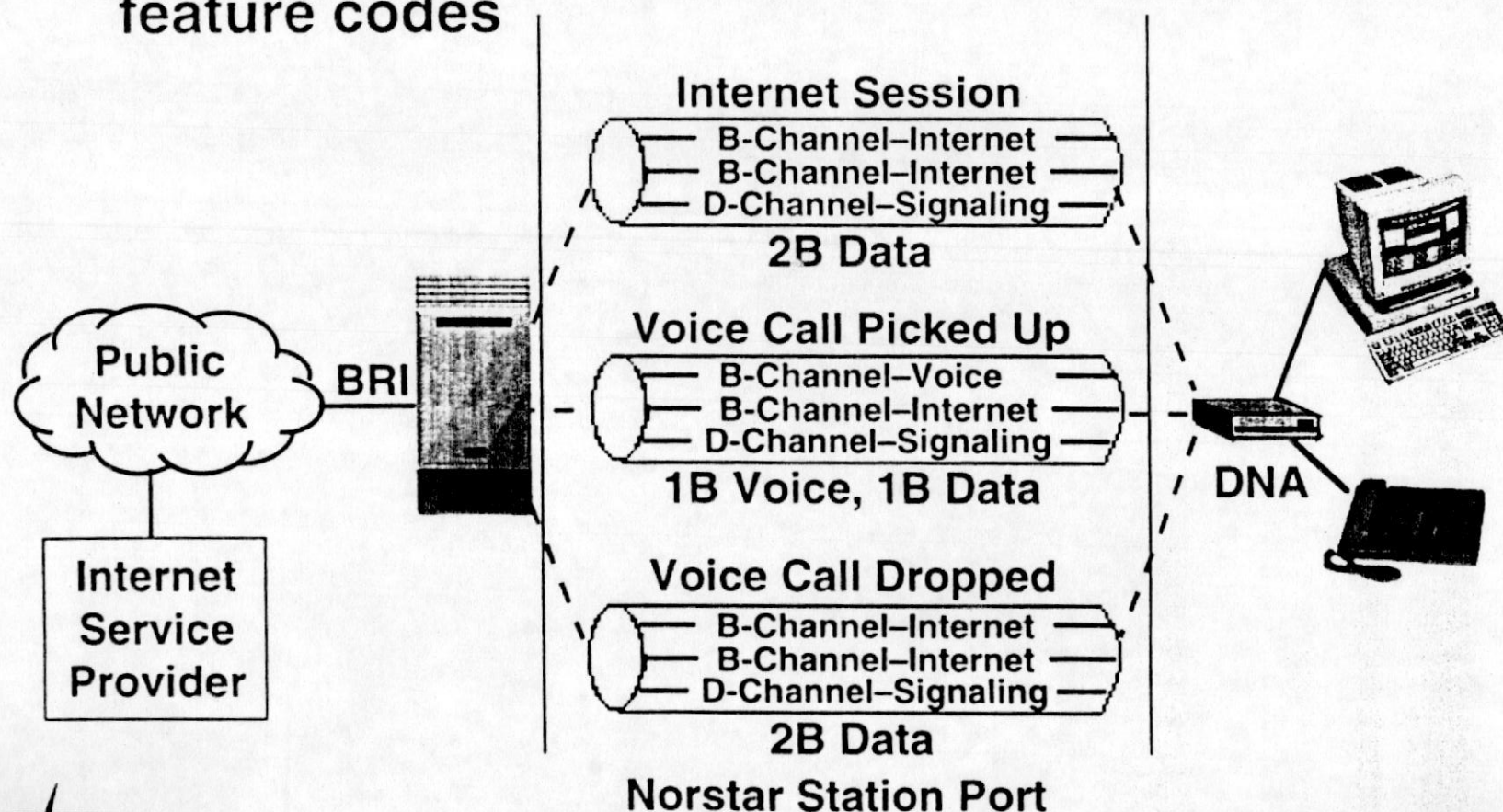
- Legend doesn't support point-of-sale or other light data applications over an ISDN BRI's D-channel (D-channel packet switching)





ISDN Applications

- Legend's ISDN does not support Dynamic Bandwidth Allocation. During a 2B data call, a Legend set can't place or answer calls or dial any feature codes





ISDN Applications

- Legend doesn't have an ISDN terminal adapter like our Digital Network Adapter (DNA) that supports TAPI
- Norstar's DNA allows TAPI applications to be used simultaneously during a data call
- DNA comes with Personal Call Manager

